



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,317	10/25/2001	Alexander Serkh	B01-068A	9845

7590 10/29/2003  
Jeffrey Thurnau  
The Gates Corporation  
Mail Stop 31-4-1-A3  
900 S. Broadway  
Denver, CO 80209

EXAMINER

HOANG, JOHNNY H

ART UNIT PAPER NUMBER

3747

DATE MAILED: 10/29/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

10/040,317

Applicant(s)

SERKH ET AL.

Examiner

Johnny H. Hoang

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3. 6) ☐ Other:

## DETAILED ACTION

### *Inventorship*

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 8-12, and 14-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayakawa et al (US 4,478,595).

Regarding to claim 1, the reference of Hayakawa et al teaches an electric control apparatus for belt tensioners including the following subject matters:

a endless drive member having a drive member parameter (abstract; and col. 3, lines 57-61);

Art Unit: 3747

a sensor detecting the drive member parameter and having a sensor signal (col. 4, lines 40-65);

a module for receiving the sensor signal from the sensor and for processing the sensor signal and for generating a control signal (col. 4, line 66 through col. 7, line 63);

a moveable member receiving the control signal, whereby the moveable member movement adjusts a drive member tension (col. 4, lines 5-39; and above discussions).

Regarding to claims 2-4, ad discussed in claim 1.

Regarding to claims 8, the reference of Hayakawa et al teaches an electric control apparatus for belt tensioners including the following subject matters: a method of adjusting a drive member (col. 1, line 56 through col. 2 line 2) comprising the steps of:

sensing a drive member parameter (as discussed in claim 1);

generating a drive member parameter sensor signal (as discussed in claim 1);

transmitting a drive member parameter sensor signal to a control module (as discussed in claim 1);

processing the sensor signal generating a control module signal (as discussed in claim 1);

transmitting a control module signal to an actuator (see abstract);

energizing the actuator (see abstract); and

adjusting a drive member parameter (as above discussions).

Regarding to claims 9 (as discussed in claims 1, and 8).

Art Unit: 3747

Regarding to claims 10-12, and 14-16 (as discussed in claims 1-9).

Regarding to claims 17-20 (as discussed in claims 1, and 8).

Regarding to claims 21-32 (as above discussions).

Regarding to claim 33, Hayakawa et al teaches an electric control apparatus for belt tensioners including the following subject matters:

operating a drive having a belt engaged with a first accessory and a second accessory, said belt having a tension (col. 3, lines 32-61);

measuring a first accessory hubload, a second accessory hubload and a second accessory rotational speed (above discussions; and col. 7, lines 22-42);

calculating a first accessory slack side tension using a first accessory hubload, a second accessory hubload and a second accessory rotational speed (as above discussions);

detecting a first accessory load condition (as above discussions);

calculating a first accessory belt slack side tension using a first accessory load condition (as above discussions);

comparing a calculated first accessory belt slack side tension using a first accessory load condition to a calculated first accessory belt slack side tension using a first accessory hubload, a second accessory hubload and a second accessory rotational speed (as above discussions); and

adjusting a belt tension (as above discussions).

Regarding to claims 34-39 (as above discussions).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayakawa et al in view of Kouno et al (US 5,085,104).

Regarding to claim 5, with reference to above rejections, the reference of Hayakawa et al discloses all that is claimed except the moveable member comprises a hydraulic actuator. The reference of Kouno et al teaches a hydraulic control apparatus for vehicle power transmitting system which including: the movable rotors 50, 52 are moved by respective first and second hydraulic actuators in the form of first and second hydraulic cylinders 54, 56, whereby the effective widths of V grooves of the pulleys 40, 42, i.e. (col. 5, line 59 through col. 6, line 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system which including the moveable member comprises a hydraulic actuator as taught by Kouno et al, so as to provide efficient apparatus for belt tensioners of Hayakawa et al.

Regarding to claims 6-7, and 13 (as discussed in claims 1, 8, and 5).

Art Unit: 3747

**Conclusion**

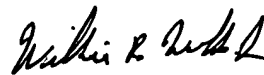
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The copies of U.S Patent are provided.

Hayashi (US 5,243,881), Morishige et al (US 5,089,964), Petzold et al (US 4,982,822), and Smit et al (US 4,458,318).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny H. Hoang whose telephone number is (703) 308-2782. The examiner can normally be reached on Monday - Thursday (7:00Am-5: 30Pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

  
WILLIAM R. WOOTEN  
Art Unit 3747

JHH  
October 23, 2003

Johnny H. Hoang  
Examiner  
Art Unit 3747